VALUING AN UNDERPERFORMING AGRICULTURAL ENTITY IN MINNA, NIGERIA AS A SPECIALISED PROPERTY

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In the absence of clear standard guides for valuing distressed agricultural properties undergoing buyouts, valuers resort to valuation template prescribed for specialised property. This study examined the anecdote that the Valuation Standards template for valuing specialised property, suffices for valuing a Non-Performing Agricultural Entity, NPAE. Data from a purposive case study of OxFarm and questionnaire survey of 29 commercial farms in Minna environs were applied using qualitative theme analysis. The study analysed the existing valuation standards template for specialised properties and conducted a benchmarking of NPAEs with specific emphasis on OxFarm case study. A collective grade point index, CGPI, was developed to assess and classify selected Farms' operational performances. The study found that the general standards for valuing specialised property do not fully recognise the operational performance state of agricultural entities. It was recommended that the recognition of operational performance status of an identified specialised property and the application of combined techniques in the choice of bases and methods matching the purpose of valuation could provide a pathway to best practices in valuing NPAEs. The study has implications for research and practice.

Keywords: agricultural entity, performance, specialised properties, valuation standards

INTRODUCTION

Valuing a non-performing enterprise for sale could be challenging, primarily because the expectations gap could be so wide between the two respective

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parties disposing and acquiring. Thus, value and valuation become critical to the decisions of both parties and are dependent on entrenched constraints and circumstances. With reference to agricultural properties, Hayward (2009) acknowledged the changing and growing nature of the challenges entailed and the fact that specialised agricultural valuation has not been well documented. In recognition of the specialist nature of agricultural valuation, the Central Association of Agricultural Valuers, CAAV (2019), was set up in the U.K. (England, Scotland, Wales and Northern Ireland) to regulate the practice and complement the roles of the Royal Institution of Chartered Surveyors, RICS and International Valuations Standards Council, IVSC in the UK.

A couple of literature has attempted to lay out road maps for agricultural valuation. Onyejiaka and Emoh (2014) in Nigeria and Kartomo and Aronsohn (2019) in a perspective paper for IVSC Tangible Asset and Business Valuation Boards are some examples. Additionally, Josiah, (2016) alluded to a type of apathy by valuation surveyors in favour of urban as against rural valuation practice, in Tanzania, a situation that is also apparent in Nigeria. Furthermore, Udoekanem (2012), demonstrated the use of contemporary approaches for buy-out valuations. However, although the research was based on real estate, the current study is different because the case study, OxFarm, is a real estate cum business interest and more importantly in a state of economic distress. Despite a long history of farm appraisal and valuation (Murray, 1969), none of these studies focuses on valuing non-performing or distressed agricultural entity undergoing a buy-out. This leaves a gap in valuation literature, particularly in the context of emerging markets like Nigeria, which needs to be filled. This study contributes to filling this gap.

A tertiary educational Institution was compelled to provide, within its immediate environment, additional teaching and research facilities that meet the challenges of 21st Century educational needs. Preliminary inspection suggested that OxFarm, an integrated farm establishment met these requirements. Thus, steps including assets valuation were initiated in mid-2019 to acquire the assets of OxFarm. The valuation exercise subsequently undertaken by a team of in-house valuers, revealed among other things, some critical challenges entailed in valuing an agricultural entity found to be distressed and underperforming. To address two of the challenges, this study examined the adequacy of extant valuation standards for valuing a distressed agricultural entity, through two principal objectives: an analysis of the existing national and international valuation standards template for specialised properties, and a benchmarking of performing statuses of competing agricultural entities with emphasis on OxFarm case study.

Conceived and set up in 2013 as an integrated agro-allied business with requisite equipment and ancillary facilities, OxFarm in six years of its existence failed to achieve any major activity for which it was designed; thus it fell short of a critical element in the definition of Specialised Property by IVSC, RICS, European Valuation Standards, EVS and Nigerian Practice Standards, NPS. This outcome is obviously asymmetrically antithetical to the global attention and national focus on food and agricultural production, which had attracted various degrees of incentives from finance, political and educational

Institutions over the years. The World Bank, Food and Agricultural Organization, FAO, governments at all levels in Nigeria are among the sponsors of agriculture incentives. For instance, exemptions of agricultural entities from rating taxation are often inscribed in rating edicts by some State governments in Nigeria.

In the case study, substantial real estate of over 7.0 hectares of land with buildings, structures and ancillary facilities were acquired and developed to support a range of potential farm operations including training and agro-allied consultancy, crop cultivation, fish, poultry and feeds production, yoghurts production, meat processing, cattle breeding, fattening and sales. However, despite its diversified nature, the farm estate has, contrary to expectations, failed thus far to achieve fulfilment. This calls for a research into the raison d'être behind the non-performance as a prelude to understanding the optimal approach and best practice for valuing the entity.

Constraints

From anecdotal evidence, the main constraints to the farm's performance were economic, technical and cultural in nature. Having hitherto expended huge capitals, the operators were apparently unwilling to commit further funds needed to hire qualified personnel to run the farm professionally, as expected of such a specialised outfit where specific skills are necessary. As Hayward (2009) argued, farm enterprises are very demanding of expertise to manage. Personal idiosyncrasy exercised by the owner is unlikely to add significantly to the value of the enterprise. Closely linked with this dilemma is the absence of technical manpower that is known to be always on-the-move in keeping with labour mobility dictated primarily by competitive remunerations. Lastly, it is also apparent that a succession line of directorship was opened for siblings and biological relations in the organisation. Subjective opinions suggest that some of the designated directors may have other areas of interest that are patently at variance with the farm business; hence the dedicated attention needed for the business to grow and flourish was largely deprived.

In a presentation to the UN Food and Agriculture Organization, FAO, Keith (2010) identified two classes of agricultural and non-agricultural factors that constitute common obstacles in agricultural valuation. In the non-agricultural subclass are family sentiments or emotions. Owner's sentiments and family attachment to particular holdings is a practical factor that the agricultural valuer has to deal with. Keith (2010) further asserted that there is an inverse relationship between the owners' sentimental feelings and the size of the holdings, suggesting that holders of relatively smaller holdings tend to be more emotionally attached with far reaching consequences for efficiency and productivity.

It may not therefore be surprising that OxFarm remains underperforming despite the vast internal prospects and opportunities offered by the entity and the external market potentials for its products from within and outside Minna. Consequently, besides the risk of assets redundancy, the risks of depreciation and obsolescence are great. An underlying case of over-investment could also be reasonably suggested by rational and empirical facts in OxFarm. The

consequences of the constraints underlying these subjective opinions needed to be tested under an empirical study and affirmed as attempted in this study. Some subjective opinions expressed concerning the root cause of the operational constraints of the farm were formed based on preliminary observations gathered during valuation inspection survey. The apparent variance between the interests of the Directors of OxFarm and the business module as well as other peculiarities, present a research problem to be corroborated by an empirical performance assessment, one of the two objectives of this study. For completeness, the other objective is to analyse the valuation standards template for valuing specialised properties.

Circumstantial factors

The farm, which, for want of an appropriate name is referred to as OxFarm Estate, is contiguous with a higher educational institution offering academic training and courses at the highest levels. Thus, a special spatial relationship which may impact valuation process is prima facie established. This is buttressed by an apparent encroachment by OxFarm on the other party's land, detected upon valuation inspection. This implies that the basis of value must be chosen with a level of caution that recognises and respects the special relationship.

A brief survey of Minna revealed a few, but growing number of modern large farm estates that seem to be undergoing a state of economic distress, the consequence of which led to the phenomenon of endemic under-performing or non-performing. Limawa Farms in Dama, OxFarm, Talba Farms, Kure Farms in Chanchaga, Fish Farm in Shango are some of the existing 29 commercial farm estates within Minna and its environs. Principal among them are Maizube farms and OxFarm Estate. This paper focuses on the latter as it presents data and research opportunities for academic purposes, albeit in a controlled form, relaxed to a reasonable extent for a fair research to be conducted.

The purpose of valuation is the critical starting point in any valuation exercise including agricultural assets. Onyejiaka and Emoh (2019) and Kartomo and Aronsohn (2019) are unanimous on this. The latter identify five purposes and the former six; it is noteworthy that asset disposal and acquisition are listed as first. The logical activity sequence in valuation process is to establish the purpose of valuation as a prelude to adopting the appropriate basis or bases of valuation, both of which will provide the valuer with a clue as to the appropriate method as depicted by Fig 1.
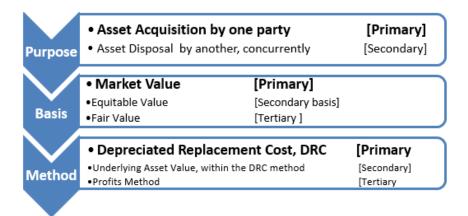
Fig. 1: Valuation Activity Sequence: Purpose, Basis and Method.
Source: Authors, 2019

The understanding that a general template for valuing a specialised property, would suffice for agricultural assets is open to argument. Specialised properties are diverse (Appraisal Institute, 2013) and too broad in classifications to symbolise agricultural properties which as well have their own intra-class diversities. Thus, a gap still exists as to the best practices in valuing them particularly if found in under-performing states. This study contributes to filling the gap and therefore makes contribution to knowledge in this regard.

In a perspective paper reporting the decision of the IVSC Tangible Assets/Business Valuation Boards, Kartomo and Aronsohn (2019) remark that the Boards were confronted with the issue of whether a separate chapter within the IVS was needed to deal with the valuation of agricultural properties. Several reasons both economic and physical were adduced to draw a clear distinction as to how agricultural properties differ from other common real property, residential or commercial. It was reported that, contrary to expectation, the Boards felt no need for additional guidance notes beyond that set out in the IVS. This conclusion however did not seem to recognise that since 2007, Australia and New Zealand have had a distinct guidance note for the valuation of agricultural properties (ANZVPS, 2007). Captioned as International Valuation Guidance Note No.10, it specifies in six subsections specific guides for agricultural properties in clear recognition of the need to draw a distinct line for the purpose of valuation. With the issue of economic distress similar to OxFarm's being experienced, the need to reconsider this IVS Boards' decision appears to be getting stronger.

Valuation of agricultural property entails processes which, beside the guidelines of the Appraisal Standards Board (2018) USPAP general standards, vary across the States and even counties in the United States of America, and also depend on the purposes of valuation (https://www.colorado.gov/pacific/moffatcounty/atom/4431). For instance, Gunnison County of the State of Colorado recognises the asset classes existing in a given valuation exercise, along with specific methods applicable for each class. It also recognises the methods which vary accordingly (https://www.gunnisoncounty.org/Valuation-of-Agricultural-Property).
However, no distinctions appertaining to the performing status of the property

under valuation are specified. The OxFarm case study satisfies the county's standard of classification of agricultural assets for valuation purpose but differs on the lack of certification of performing status which is left unaddressed in the county's procedures. Elsewhere in the same State, the Boulder County (www.bouldercounty.org) fully recognises the need for certification of performance levels of farms undergoing valuation.

Owing to the importance attached to it, the subject of agricultural valuation has received attention from stakeholders outside the valuation profession. Sedlacek (2010) for instance, attempted to compare the standards of valuing biological assets in Czech Republic with the International Accounting Standards, a body that shares cooperation and mutual recognition with the IVSC. The study found that while the international standards used fair value basis, the Czech-preferred standard is prudence principle. This suggests that local valuation standards such as the Nigerian Valuation Practice Standards, NVPS which take due cognisance of national and local economic environment are considered equal in importance with international standards. Notwithstanding, as argued by Kolbre and Kask (2010), national valuation standards should reconcile substantially with international standards.

Any valuation exercise claiming compliance with the IVSC, RICS, NPS and EVS standards must take account of their respective basic contents. It is hardly surprising that IVS occupies a prime place in terms of standards as it has been adapted and adopted by the Nigerian Practice Standards, NPS of the Nigerian Institution of Estate Surveyors and Valuers, NIESV. The NPS (2018) and IVSC (2017) for example, prescribe six general requirements, principal among which is the Scope of Work with 19 subheads.

Valuation of agricultural properties has come under renewed scrutiny in recent times as affirmed in Onyejiaka et al. (2014), Walt (2016), RICS (2016) Professional Guidance, Lane (2017), and Kartomo et al (2019). Specifically, Kartomo et al (2019) expressed subtle apprehension suggesting that the existing valuation standards hitherto emplaced might be insufficient to cope with the demands and challenges entailed in the valuation of agricultural properties. In particular, Lane (2017) affirmed that the valuer is often limited in access to relevant data such as the farm's performance data. Even a detailed financial data still leaves open the problem of standardisation (tim.lane@htw.com.au). Thus, the development of an index is helpful for assessing farms' operational performances reasonably well. However, the Tangible Assets and Business Valuation Boards recently inaugurated by the IVSC affirmed that the standards are indeed sufficient for valuing agriculture entities; but in practice, the degree of sufficiency for valuing such entities when under- or non-performing for substantial period of life cycle, is not clear. Thus, there seems to be a gap in valuation standards to recognise special cases such as NPAEs, a situation that makes this study relevant. To the best of the authors' knowledge, there is a paucity of literature reference to cite as standard for valuing non-performing agricultural entities, especially in the context of African markets. There are glaring cases of such properties in Minna and its environs and the number seems to be rising. A research into the subject is thus, necessary.

METHODOLOGY

The study aimed to expose two vital underlying issues that merit due attention in the valuation of a distressed agricultural property when a buy-out is contemplated, where the possibilities of overvaluation or undervaluation exist. To achieve this aim, the study examined the general template for valuing specialised properties, developed an index for assessing and classifying the performance status of agricultural entities and applied same on 29 commercial Farms including OxFarm. The study is based on an empirical study of OxFarm which was slated for a buy-out while in a severely distressed state. Thus, the location (in Senatorial Zone A) is a bye-product consequence of the purposive valuation case study. Though Niger State and indeed each State in Nigeria has three senatorial zones which are mere political divisions, OxFarm location is unique because Minna is the capital, and enjoys an urban status that is not always available to any other city in the State. There are ample numbers of farms in Minna environs. However, a sample of 29 was considered sufficient to provide information on performance statuses of farms within the study area.

Theme approach was adopted to complement the qualitative research approach in that it allows the crucial facts that impact value to be identified, as well as other underlying issues of interest that might not be so obvious without special attention. The study used the identified themes to address the research and interpret the data. Maguire and Delahunt (2017) affirmed the usefulness of thematic analysis for qualitative data. Defined as the process of identifying patterns and themes within qualitative data, theme analysis has advantages of not being tied to any particular epistemological or theoretical perspective, thus making it a flexible method of research where qualitative data are predominant (Clarke and Braun, 2013 in Maguire et al, 2017).

Direct knowledge and experience of the researchers coupled with limited survey of some non-performing commercial agro-allied properties in Minna is also an asset in data mining for this study. The report of OxFarm valuation case study by Olatunji et al (2019) is the main secondary data source and considered as good as a primary data source with relevant literary materials which are characteristically sparse. Agriculture entities under valuations are the population of study. However, the population frame is virtually indeterminate probably because valuation is largely a confidential matter; due to privity of contracted briefs, the value and valuation are hardly disclosed. In rare cases where it was disclosed that valuations were carried out, the valuation reports could not be sighted. This explains the adoption of a purposive selection of OxFarm valuation case study. It has been argued by Ibanez, Daly and RAND Europe (2007) that a fewer case with rich data can compensate for large samples with sparse information. Ibanez et al (2007) found in http://www.etcproceedings.org/paper/optimality argued that by extracting a richer data content from each observation in a small sample (a case study), optimal results equivalent to that obtainable from a large sample can be achieved. Narratives, tables, charts are utilised to present some data and information with clarity.

A highlight of the basic contents of the case study valuation was made in Olatunji et al (2019), wherein the techniques, approach and bases of valuation were detailed. These include the process of crunching the figures to obtain the opinion of value for acquisition of the farm estate. This present study focuses on the minimum standards set by local and global setters as well as ideas of authors and literature with particular emphasis on agricultural properties. Then the application of the standards in the subject empirical case was demonstrated. Theme analysis is conducted on unique attributes and interesting characteristics of the Farm to illustrate the special circumstances and portray the constraints in the valuation exercise which are considered attention-demanding.

The study would be of benefit to valuers engaged in valuation of distressed farm estates in Minna as empirical cases are rare. As well, the organisations which themselves are experiencing, or are likely to experience similar conditions in their revival strategies and new investors in need of guidance against pitfalls, are potential beneficiaries. The mystery behind the apparent failures of a Farm estate of this nature and magnitude to achieve fulfilment calls for a cursory research into the raison d'être behind the non-performances or underperformances, as a prelude to understanding the optimal approach and best practice for valuing an entity of such description.

RESULTS

Benchmarking farms' performing status for the purpose of valuation
The first objective of this study is to certify, through a purposeful comparative method, the performing state of a NPAE slated for valuation as a specialised property. A range of scenarios and peculiarities could emerge when an entity being valued is found significantly non-performing. For commercial agricultural entities, operational performance status is potentially a more critical determinant of value as compared to non-agricultural ones. The reason could be attributed to the nature of agricultural products which are characteristically bulky, perishable and of relatively short shelf-life, among others. Thus, the main challenge is how to assess objectively, the operational performance status of a special property. To this critical challenge the paper now turns its attention.

Benchmarking the performance statuses of agricultural entities through a capacity survey
There are several ways to measure the performance status of a business-oriented entity. One method adopted by Academy Treasurers (2019) is the annual financial reports like profit and loss, assets and liability. Viewing its present state of sheer inertia, OxFarm can be instinctively described as non-performing. However, a more appropriate method is one that can be used to assess performance relative to, and in comparison with, other businesses of its kind.

Table 1: Capacity utilisation survey of 29 selected agro-allied farms in Minna environs

| | Capacities of Production per annum, (Subject to max. of 3 Leading Products) | | | | | | | | | |
| | PRODUCT 1 | | | PRODUCT 2 | | | PRODUCT 3 | | | |
Farm S/N	Max Installed	Present Output	%	Max Installed	Present Output	%	Max Installed	Present Output	%	Mean % Of 1, 2, or 3
1	3000	2680	89.3	24000		0.00	-			44.7
2	45	35	77.8	3570	980	27.5	270	38	14.1	39.8.
3	120000	35000	29.2	200	89	44.5	-			36.9
4	345	224	64.9	4500	540	12.0	-			38.0
5	84	68	81.0	54000	9000	16.7	-			49.0
6	253	128	50.6	30000	2000	6.7	4500	1580	35.1	30.8
7	6700	4300	64.2	3500	2800	80.0	-			72.1
8	90200	71000	78.7	-			-			78.7
9***	220	39	17.7	125000		0.00	220000		0.00	6.0***
10	2700	1280	47.4	45000	5041	11.2	280		0.00	19.5
11	32500	22000	67.7	250		0.00	-			34.0
12*	75300	61900	82.2	-			-			82.0*
13	7580	3000	39.6	3800		0.0	410	145	35.4	25.0
14	100000	28000	28.0	-			-			28.0
15**	54000	30000	56.0	3025	300	9.9	-			33.0**
16	7800	5500	70.5	-			-			70.5
17	450	380	0.84	20000		0.00	7800		0.00	28.0
18	4500	2800	62.0	-			-			62.0
19	36000	9200	26.0	-			-			26.0
20	40	25	63.0	4500	2500	5.6	375	204	54.4	41.0
21	250000	160000	64.0	800		0.00	-			32.0
22	35000	15500	44.3	380	35	9.2	360		0.00	17.8
23	2530	1200	47.0	7080	700	9.9	-			29.0
24	45000	29000	64.0	-			-			64.0
25	8050	200	2.5	3500	870	24.9	500	210	42.0	23.1
26	2500	1540	61.6	78000	34000	44.0	-			52.8
27	65000	20500	31.5	-			-			31.5
28	5280	4300	81.0	350		0.00	450		0.00	27.0
29	7280	300	4.1	-			-			4.1
Median			62.0			10.0			14.0	33.0
Mean			54.0			19.0			18.0	38.0
SD			24.0			22.0			21.0	19.0

Field survey (2019)
*Best Performing, **Median, ***Case Study

Most plant and equipment have designed capacities. Agricultural and non-agricultural alike have maximum production capacities which can be gauged over a specific period, usually one year. For example, in Colorado (US), agricultural properties are those so classified by Statute (CRS 39-1-102) for valuation purposes and productive capacity is one of the two recognised performance measurement criteria (www.bouldercounty.org). Using this method, a schedule of capacity utilisation table was produced for 29 Farms studied in Minna, including OxFarm (Table 1).

A study of 29 corporate Farms in Minna produced the Capacity Utilisation Schedule in Table 1.

The products include fish, beef, poultry, fruits and feeds. Their productive capacities were measured as a ratio of output and installed capacities. For convenience, the respondents were restricted to maximum of 3 leading products as observations supported. Production capacities were recorded in terms of quantities such as weights (kilograms), number or, packs (sacks). The units of measurement will even-out when converted to percentiles. As shown, most farms have one product, some have two while a few have three. OxFarm occupies serial number 9*** on the table with only one product but huge capacities for two others for which production was nil. The result is a subsequent 6.0% mean capacity performance compared to 33% for the Median Farm, (Serial number 15) and the highest at 82%, (Serial number 12). The results of the analysis are transformed into an index for clearer understanding of the Farms' performance statuses in Table 2.

Benchmarking the performance status of OxFarm
The non-performing status of OxFarm was apparent, self-evident from inactivity and dormancy. However, for the purpose of this study, there is need for a more scientific method with benchmarks for assessing organisational performance more objectively through an index. No satisfactory operational performance measurement index for a multi-product establishment could be found as most available are used for single-product farms. Patterned in the form and functions of cumulative grade point average, (CGPA) used to assess a student's overall performance at most Universities worldwide, the collective grade point index, CGPI was developed and used with modifications as a performance measurement index depicted in Table 2. The table reveals that the best performing Farm has a CGPI of 3.50 while the Median Farm has 2.0. The comparative CGPI of 0.00 clearly reveals the non-performing status of OxFarm more vividly than does a percentile in Table 1. The valuation will proceed with OxFarm appropriately classified as a NPSP, of which NPAE is a subset.

In column 1 are the products with assigned weights; each Farm is restricted to its best 3 products designated as P1, P2 and P3 with weights of 3, 2 and 1 respectively according to the level of attention and prominence it receives in the farm's Management. Actual output of a responding farm as a percentage ratio of its designed capacity was applied, with assigned weights and gradings. 6-scale grades system on A to F was matched with respective points from 5 to 0. The CGPI is obtained by dividing the total grade points by the total weight, 6. The result shows the performance indices of all Farms studied. Results of 3.5 CGPI for the best Farm and 0.00 for OxFarm and a mean of 2.7 were obtained as part of the benchmarks which rated 0-1.99 as non-performing, 2.00-2.99 as low, 3.00-3.99 as moderate and 4.00-5.00 as high performing farms. Thus, it is justifiable to rank OxFarm at 0.00 as a non-performing agricultural entity, NPAE. The outcomes in Table 1 and Table 2 are also useful in assessing the potential returns of OxFarm, and the subsequent Bid Figures and Ceiling Figures for purchase negotiations.

Table 2: Performance Index measured using Collective Grade Points of Farm Productions

Product	Weight	Output as % of Capacity	Grade	Point	Grade Point	Collective Grade Point	CGPI
Best Performing Farm							
P1	3	62.50	B	4	12		
P2	2	55.56	C	3	6		
P3	1	54.40	C	3	3		
	6					21	3.50
OXFARM							
P1	3	0.00	F	0	0		
P2	2	0.00	F	0	0		
P3	1	17.73	F	0	0		
	6					0	0
Median Farm							
P1	3	69.87	B	4	12		
P2	2	0.00	F	0	0		
P3	1	0.00	F	0	0		
	6					12	2.00

Source: Extracted from field survey, 2019

In column 1 are the products with assigned weights; each Farm is restricted to its best 3 products designated as P1, P2 and P3 with weights of 3, 2 and 1 respectively according to the level of attention and prominence it receives in the farm's Management. Actual output of a responding farm as a percentage ratio of its designed capacity was applied, with assigned weights and gradings. 6-scale grades system on A to F was matched with respective points from 5 to 0. The CGPI is obtained by dividing the total grade points by the total weight, 6. The result shows the performance indices of all Farms studied. Results of 3.5 CGPI for the best Farm and 0.00 for OxFarm and a mean of 2.7 were obtained as part of the benchmarks which rated 0-1.99 as non-performing, 2.00-2.99 as low, 3.00-3.99 as moderate and 4.00-5.00 as high performing farms. Thus, it is justifiable to rank OxFarm at 0.00 as a non-performing agricultural entity, NPAE. The outcomes in Table 1 and Table 2 are also useful in assessing the potential returns of OxFarm, and the subsequent Bid Figures and Ceiling Figures for purchase negotiations.

Operating at 6.0% of its designed capacity or 0.00-0.99 on the CGPI scale of 5.00, the farm could be classified as NPAE. First, the valuer could be restricted in the choice of methodology, when it is imperative to combine methods and bases. This represents a contradictory demand paradox. For example, the Profits method is the method of choice, first among others, when valuing a corporate commercial-oriented entity. In principle, theory and practice standards it is to take precedence over all other methods. But in reality, a NPAE lacks the basic data to support the use of Profits method, and recourse has to be made to the next-best method. It remains debatable whether the value arrived at using a subsidiary method could sufficiently produce the best result.

Attention is now turned to the general template prescribed for valuing a special property.

General template for valuing specialised properties

Definition

The term "specialised property" can be nebulous unless defined in the valuation terms set by the global valuation standard setters. Thus defined, a specialised property is one that is rarely, if ever, sold in the market, except by way of sale of the business or entity of which it is a part, due to the uniqueness arising from its specialised nature and design, configuration, size, location or otherwise (RICS, 2014; NPS, 2018). This definition is however silent about the operational performance status of the property so defined. A whole range of value attributes of a specialised property could alter when the core functions become dormant, and only a distinct class would sufficiently address them. The IVSC (2017) further mentions "specialised or special-use" assets in IVS 300 Section 70 and describes how to proceed with their valuation in paragraph 70.1.

Valuation standards

The global standards, (RICS, 2014; EVS, 2016; IVS, 2017) as well as local standards, (NPS, 2018) are unanimous that specialised properties should be valued by the depreciated replacement cost concept, DRC on existing use basis, EUV. Where evidence suggests otherwise, recourse should be made to alternative approaches.

Apparently, RICS offers the most comprehensive view of SP as regards its definition, basis and method of valuation. While adopting the afore stated definition in its glossary, RICS (2014, 2018) states that an SP should be valued using the DRC approach referred to in FRS 15 as a basis.

RICS (2014) offers another avenue to decide whether a property is a SP: the possibility or otherwise of providing only an Existing Use Value, EUV. Valuation could be done by reference to its trading potentials, (Profits method) or by logical extrapolation of any available market evidence. A 'no-EUV' situation may arise either because the property is not in use at all (non-performing), or not in use for the purpose for which it is designed and constructed. The latter case is construed as alternative use implying an Alternate Use Value, AUV. The RICS further recommended the DRC method for valuing SPs with evidence of adequate potential profitability.

In a similar embodiment, 1VSC 2017 states thus:

"…many types of plant and equipment are specialised and where direct sales evidence for such items will not be available, care must be exercised in offering an income or cost approach of value when available market data is poor or non-existent. In such circumstances it may be appropriate to adopt either the income approach or the cost approach to the valuation."

According to IVS 300 asset standard, the cost approach will be applied in three steps beginning with an estimate of the cost to a market participant of replacing the subject asset by reference to the lower of either the reproduction or replacement cost. The replacement cost is the cost of obtaining an alternative asset of equivalent utility, either a modern equivalent providing the same functionality or the cost of reproducing an exact replica of the asset; the details of the application are expressed in IVS 105 paragraph 70.1 to 70.14.

In addition, special consideration for Real Property interest are described in IVS 300 section 80.

In a general overview, TEGoVA (2016) under its sub-section 6.4.1 affirms that the cost approach is the most commonly used to estimate the replacement value of SPs and other properties that are seldom, if ever sold or let in the market. By this token, a residential bungalow that would hardly ever be sold or let in the market (say by reason of location inaccessibility) would qualify to be treated as a SP for the purpose of valuation. This is because lack of property market activity would preclude the use of comparative or income approaches. The foregoing arguments might have supported EVS (2016) conclusion that SPs are normally unsuitable as security for loans other than upon basis that takes account of AUV of the property.

The Nigerian Valuation Standards, NPS (2018), accept the positions of IVSC and RICS discussed above.

It can be inferred from the foregoing discourse that, in defining and recommending valuation bases and methods for a SP the existing main Standards do not clearly recognise the importance of the current operational performance status in valuing an entity slated for valuation. This means an SP is assumed to be operationally working as designed and constructed, with no clear statements that could be applied to a NPAE. Reasons for not recognising this dimension of SPs in existing standards are not known. However, one could take the risk to attribute non-recognition perhaps to the fact that only scattered references are given to SPs in all valuation standards literature. None has treated SPs as a distinct class of assets. For example, the IVSC (2019) Assets Standards did not offer a distinct class of assets to SP. A snapshot into the Assets Standards of RICS VPGA 1-13 and IVS 101-105 adopted by NPS (2018) shows that all are accountable for this omission.

A way forward is to sub-classify SPs into less heterogeneous categories based for example on their performance statuses: producing SP (PSP) or non-producing SP (nPSP), as illustrated in Fig. 2. While PSPs are in active production and operational performance with men, money and machine, NPSPs are not.
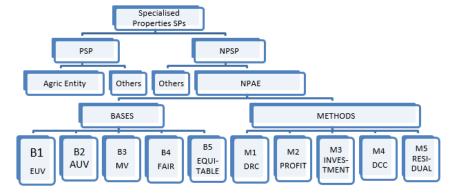

Fig 2: Existing Bases and Methods of Valuing Non-Performing Agricultural Entities, NPAEs
Key: EUV= Existing use value; AUV= alternate use value; MV= market value; DRC= depreciated replacement Cost; DCC= direct capital comparison; PSP= performing specialised

property; NPSP= non-performing specialised property; NPAE= nonperforming agricultural entity.
Source: Extracted and modified from Valuation Standards

For the purpose of classification, a producing SP could be defined as one that is actively continually performing to a significant proportion of its designed capacity. Conversely, a non-producing SP lacks all the qualities of continuity and performance to capacity as defined. Thus defined, the appropriate basis and method of valuation could be explicitly chosen: Income or profit method for a Producing SP, otherwise, the DRC method. Appropriate classification, therefore, should be the first step in the valuation process of an identified SP; then, the valuation would proceed as prescribed by the valuation standards being applied.

From another perspective, the use of mass appraisal technique was suggested by Walt (2016), with emphasis on all asset components including biological assets. This agrees with Olatunji et al (2017) which demonstrated the application of applied principles and ICT tools in valuing commercial properties. RICS (2016) professional guidance for UK on Farm Stocktaking Valuation is inapplicable here because it excludes fixed assets and DRC method. Only biological assets, store and such items, which are not present in OxFarm case, are covered. All these are different dimensions possible in valuing SPs beyond the present scope.

The basis of valuation: going concern and equitable value
The concept of Going Concern, GC assumes that the property under valuation would continue to be used in the processes for which they were designed, constructed and installed. It reflects the limitations of the business with all its strengths and weaknesses. Going concern has been adopted as basis of valuation for the purposes of mortgage, taxation mergers and acquisitions among others. The OxFarm's case has been recognised as a medley of both business and real estate concerns. Thus, it would not have been appropriate to value it solely as a business. Secondly, the use of going concern valuation is beset by a number of weaknesses. In Britain and most advanced countries, the use of going concern basis has faced strong criticism. Among the reasons is that a business company may be approaching declining productivity, a fact which is obvious in OxFarm. This may explain why NVPGA 6 paragraph 4.4 recommends GC as a basis for valuing intangible assets only, which field observations had proved to be lacking in OxFarm. (IVS 210 paragraph C1 and RICS VPGA paragraph 4.4 are all unanimous on this point). The new thinking is in favour of the concepts of EUV and AUV taking into cognisance the mind-sets of the market participants involved. The identified buyer in this case, an acquiring authority, intended to find some use for the asset components under the expectation that the components would be adaptable into the training, education and academic activities in the agriculture discipline of the buyer.

In a clear term, IVS 104 classifies the bases of value into two: 6 IVS-defined bases and 4 other bases. It is instructive to note that GC basis is excluded from both classes, though the list is non-exhaustive. The IVS-defined Equitable Value basis of valuation seemed to meet the requirements of OxFarm valuation

instruction. The choice was informed by the fact that the identities of the two prospective parties to the valuation transaction have been established: "two specific identified parties" with additional location "advantages and disadvantages that would not be available to most other market participants", and "reflecting the interests of both parties".

Characterisation of OxFarm as a Special Property, SP

A superficial look into valuation practice tends to suggest that an entity like OxFarm is viewed as a specialised property and may be valued as such without any further considerations. However, a closer observation in the case study revealed that OxFarm fulfils only parts of the attributes of a special property defined by RICS (2014) and adopted by NPS (2018). Table 3 is an attempt to depict this observation more clearly.

Table 3. Characterization of OxFarm as a Specialised Property

	1	2	3	4	5	6
Specification	Design/ Construction	Configuration/a rrangement	Size	Location	Performance	Others
Status as SP	√	√	√	√	×	Unclear

Source: Case Study, 2019

Key: √ = Fully met   √= Partially met   × = Not met

It is noteworthy that the EUV does not connote performance status as envisaged in this study. Thus, failing to meet up substantially with these prescriptions, it became inevitable to apply appropriate modifications and adopt multiple bases and approaches to value OxFarm. Although IVS 105 does not impose the adoption of alternative approaches in valuation practice, special constraints and circumstances in the process of the subject exercise demanded so, principally for value-crosschecking purposes.

The subject farm was designed and constructed as an integrated commercial farm. The buildings, structures bear evidence in support of this assertion. Likewise, the configuration and arrangement are geared towards the fulfilment of the commercial farming. The size of the farm covering over 7.0 hectares of land originally developed with facilities for cattle breeding, meat processing, dairying, poultry, and fishery can be adjudged to be in line with a large-scale commercial farm enterprise. Located in a neighbourhood where educational institution and residential properties are predominant, the description of specialised location cannot be fully met. Finally, although, OxFarm is positioned to operate as an agricultural entity, facts on ground point to a gross deficit in functioning as such. Thus, a major gap exists between designed use and operational performance. Although the valuation standards and most literature recognise productivity as a crucial factor in agricultural valuation, the mechanism by which it can be assessed objectively and incorporated into the valuation process, is missing in current valuation literature.

From the foregoing, the key findings of the study can be summarised as follows:

1. Based on empirical survey of similar commercial bodies in Minna, and beyond mere conjecture and visualisation, OxFarm is classifiable as a

non-performing agricultural entity. Only an empirical research involving its competitors could reveal the true activity-status of performance of a commercial entity, slated for valuation for the purpose of classification as NPAE.

2. It is appropriate to value OxFarm as a specialised property with identified peculiar characteristics, the result of its non-performing status.

3. The general standards for valuing specialised properties do not fully recognise the operational performance of agricultural entities.

Thus, in valuing a non-performing agricultural entity, there is need for some adaptations in the prescriptions of Valuation Standards for valuing specialised properties. The next section concludes the paper.

CONCLUSION

A whole range of scenarios emerged and altered where the agricultural property identified as a Specialised Property lies redundant, underperforming, outrightly non-performing or operationally inactive for a substantial period of its existence.

The Underlying Assets approach, a subset of DRC recommended by IVS2017 is particularly helpful and relevant because it allows the assets to be classified into distinct components, each amenable to an appropriate basis and method of valuation. Thus, it is possible to adopt the basis and method considered suitable. The basis and method suitable for one component or asset class may not be so for other classes. For instance, land as an asset component may be valued using Market Value Basis and comparable method, if there is sufficient evidence of market transactions in the neighbourhood. On the contrary, this basis and method may not be suitable for other components in the same business, if such evidence is unavailable, insufficient or unreliable.

Dwelling on the major findings, it is concluded that:

The general DRC template for valuing SPs needs to be tinkered with, in order to arrive at an appropriate approach to valuing NPAEs. More specific and restrictive bases and methods of valuation are required for valuing SPs rather than the general template prescribed by most Valuation Standards.

The following recommendations are made upon the findings and conclusion:

1. Using an appropriate assessment index, an identified SP slated for valuation should first be graded to justify classification or otherwise as a NPAE.

2. To value a SP certified as a NPAE, valuers should adopt multiple bases and methods deemed appropriate as dictated by the purpose of valuation, the special constraints and circumstances evolving around the given valuation exercise. This could provide a pathway to best practices in valuing NPAEs.

3. There is need to reconsider the IVS Tangible Assets and Business Boards' decision concerning the non-recognition of agricultural entity as a distinct class of specialised property.

This study has made important contribution to knowledge with respect to asset valuation literature. By adapting and extending the valuation prescriptions of widely used Valuation Standards for the valuation of specialised properties, SPs, to establish a procedure for the valuation of a special class of SPs (non-performing) for which no provision is made in the Valuation Standards, the study makes theoretical contribution to knowledge. In applying this procedure to value such an existing non-performing agricultural entity, the study makes practical contribution to knowledge. It has therefore contributed in filling the gaps created by the paucity of literature in this area of study, particularly in emerging markets.

The study has implications for valuation practice and research. The implication for practice is that in valuing SPs, valuers need to consider all essential aspects of the property and adapt procedures prescribed in the Valuation Standards as necessary. This may lead to adopting multiple valuation bases and methods. The implication for research is that further studies are necessary to determine best practices for the valuation of classes of SPs for which the Valuation Standards make no definite prescription.

As is usually the case, the study has limitation. Although it has established a procedure to value a non-performing SP and used it to carry out a valuation to demonstrate its applicability, it does not claim that this procedure will be applicable to the valuation of all classes of non-performing SPs. Moreover, the inherent nature of the property market as being local, can restrict the generalisation of results. Thus, caution should be exercised in generalising the results. It is advised that it be limited to markets of similar characteristics. Nevertheless, the procedure can be adapted for other classes of non-performing SPs and various other markets. Further research is necessary in this regard. Accordingly, the study suggests that future researchers should consider studying the valuation of other classes of non-performing SPs in different markets.

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